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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,288	02/06/2004	That Nguyen	H0004145	8487
7590	06/06/2005		EXAMINER IP, SHIK LUEN PAUL	
Larry J. Palguta Honeywell Law Department 3520 Westmoor Street South Bend, IN 46628			ART UNIT	PAPER NUMBER
			2837	

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/774,288

Applicant(s)

NGUYEN ET AL.

Examiner

Paul Ip

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/11/04.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 5/11/2004 in compliances with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-5, 10, 12, 14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Plunkett (4,093,900).

With respect to claims 1, 3-5, 10, 12, 14, and 15, the patent to Plunkett discloses a dynamic brake blending for an inverter propulsion system comprising a motor 10, a voltage detection circuit 80, a plurality of dynamic brake resistors (46, 48, 50) connected in parallel, a plurality of switches (52, 54, 56) connected in series with the dynamic brake resistors, and a control circuit for controlling the switches. See figure 1.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Plunkett (4,093,900) in view of Kumar (5,323,095).

Claim 2 further recites four dynamic brake resistors and four switches associated with each of the dynamic brake resistors respectively. However, the patent to Kumar shows in figure 2 five dynamic resistors R1-R5 and five switches (60-64). Prima facie case is made that the number of the dynamic resistors and switches are a matter of

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power determination for the motor dynamic braking system. The number selection is based on the need of the motor power control system. Since Plunkett shows three dynamic brake resistors and three switches connected in series with the dynamic brake resistors, it would have been obvious to one of ordinary skill in the art to provide Plunkett with different numbers of dynamic brake resistors and switches in the number of four or five as taught or suggested by Kumar.

8. Claims 6-9, 13, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Plunkett (4,093,900) in view of EP 0393814 or JP63-161886.

Claims 6-9, 13, 16, and 17 further recite temperature sensors associated with each dynamic brake resistors. However, EP 0393814 discloses temperature sensor for an electrical load resistor such as dynamic braking resistor comprising a temperature sensor for sensing the temperature of the dynamic braking resistor. JP63-161886 shows in figures 1-4 a temperature sensor 14 for sensing the dynamic braking resistor 4 temperature. Prima facie case is made that Plunkett detects the voltage and current to control the dynamic braking resistors providing the similar temperature detection and protection of the dynamic braking resistors. Therefore, it would have been obvious to one of ordinary skill in the art to provide Plunkett with the temperature sensor as taught or suggested by EP 0393814 or JP63-161886 for each dynamic braking resistor as recited in the claims.

### ***Citation of Pertinent References***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patents/publications to King et al (2004/0238243), Duke et al (5,432,413), Grabowshi et al (5,373,219 or 5,280,223), Luy et al (4,035,692), Danielson et al (5,394,069 or 5,327,055), Ozaki (4,145,641), Westlake (6,094,024), Suita et al (4,426,606), Kumar et al (2005/0005814), Kumar (5,396,214), Youm et al (2004/0160792), Youm et al (2004/0160208), Matty (4,284,930), Roth-Stielow et al (6,081,086), Matty et al (4,458,185), Kumar (6,829,556 or 2004/0162696), Kojima et al (2005/0001635), and Hakala et al (5,847,533) disclose dynamic braking resistor control systems for motors.

### ***Communication Information***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Ip whose telephone number is (571)-272-1941.

The examiner can normally be reached on Monday to Friday from 6:30 am to 3:00 pm Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin, can be reached on (571)-272-2107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).



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AU 2837